

Client 1

Network

Repository Data Server 2

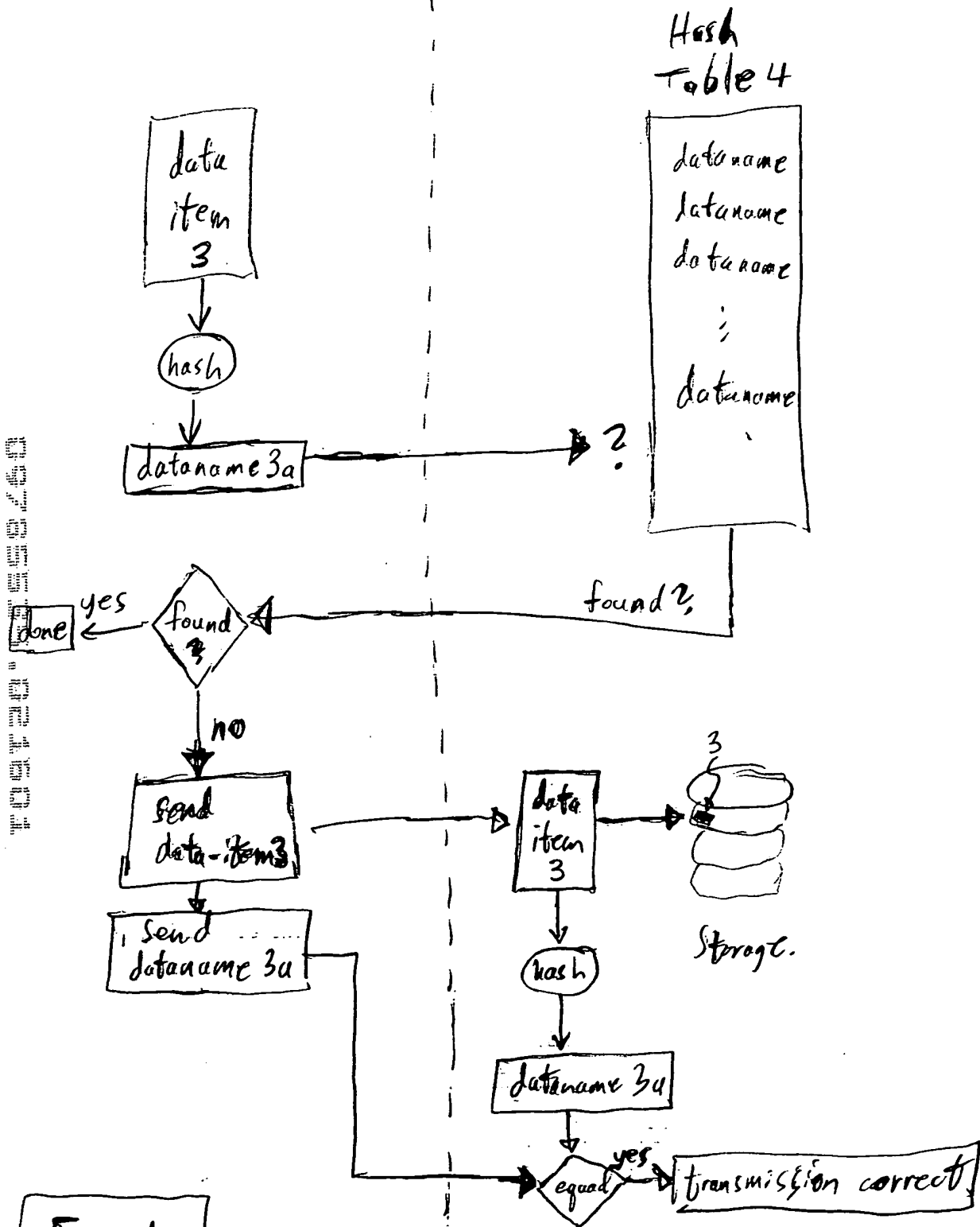


Figure 1

Client 1 (initiator)

Network

Repository Data - Server 2

Create access  
authorization  
credential 3b  
for data-item 3

request access  
(dataname 3a)

Ask for proof  
that client has  
data-item 3

Data-item 3

compute  
proof

dataproof 3c

request proof  
(data-item 3)

Data-item 3

compute  
proof

dataproof 3e

Compare  
proofs

Same  
?

yes

Add to database

named-object 3d | dataname 3a

Named-object database 6

named object 10 | dataname 3a

named object 12 | dataname 13

⋮

Figure 2

Client 5 (read)

Repository Data - Server 2

Figure 3

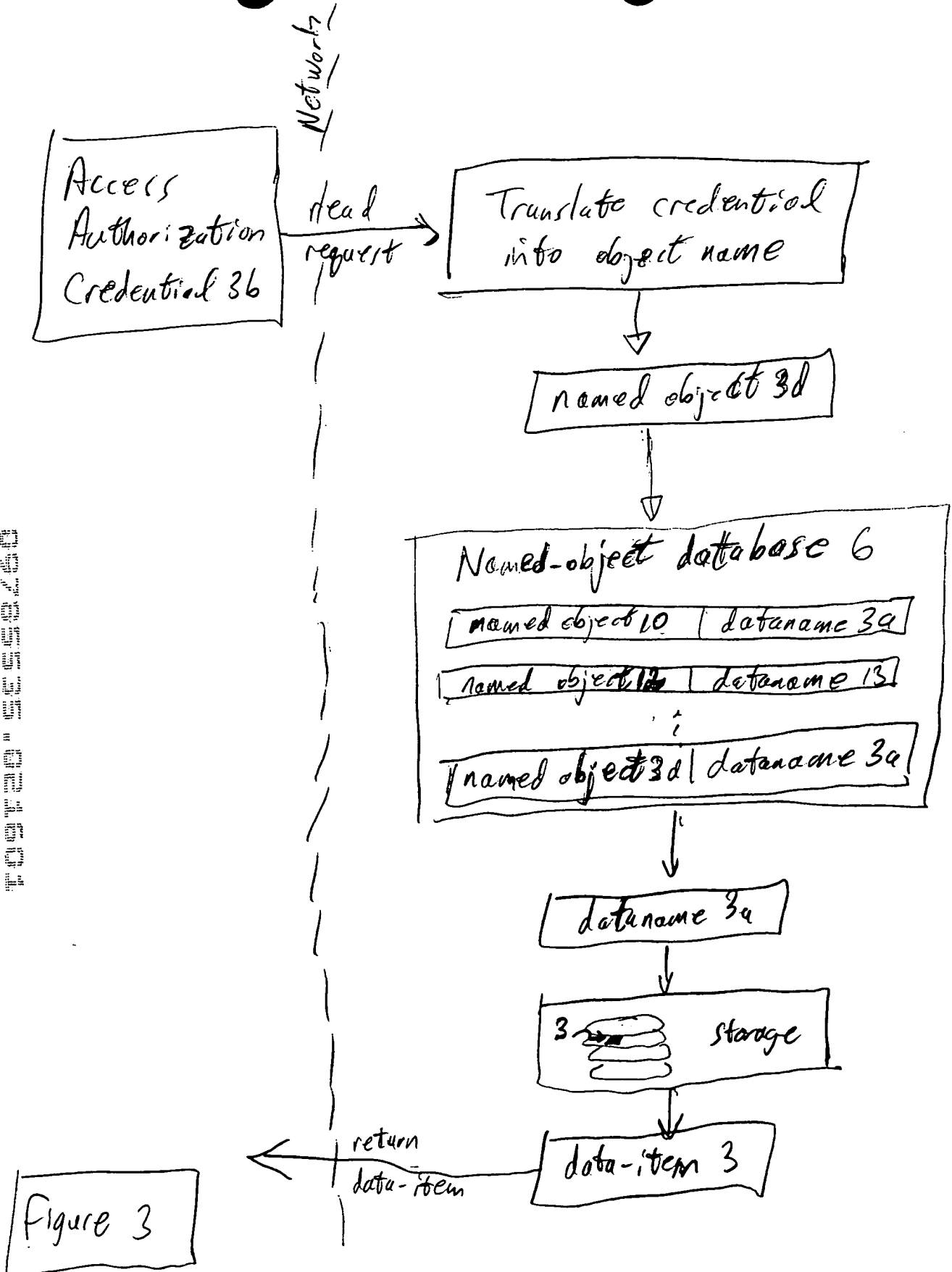


Figure 3

USE

REPOSITORY

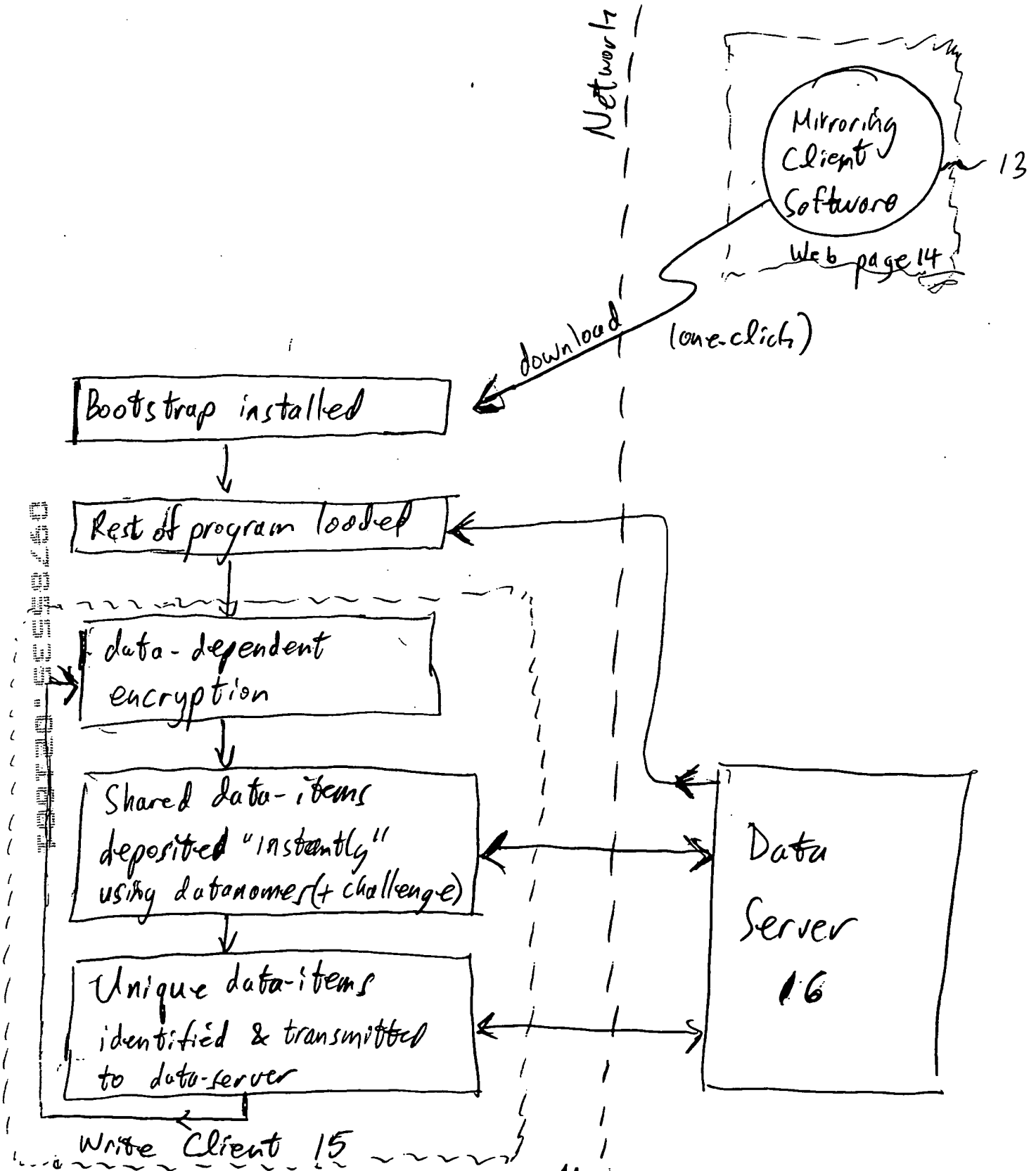


Figure 4

FIGURE 5

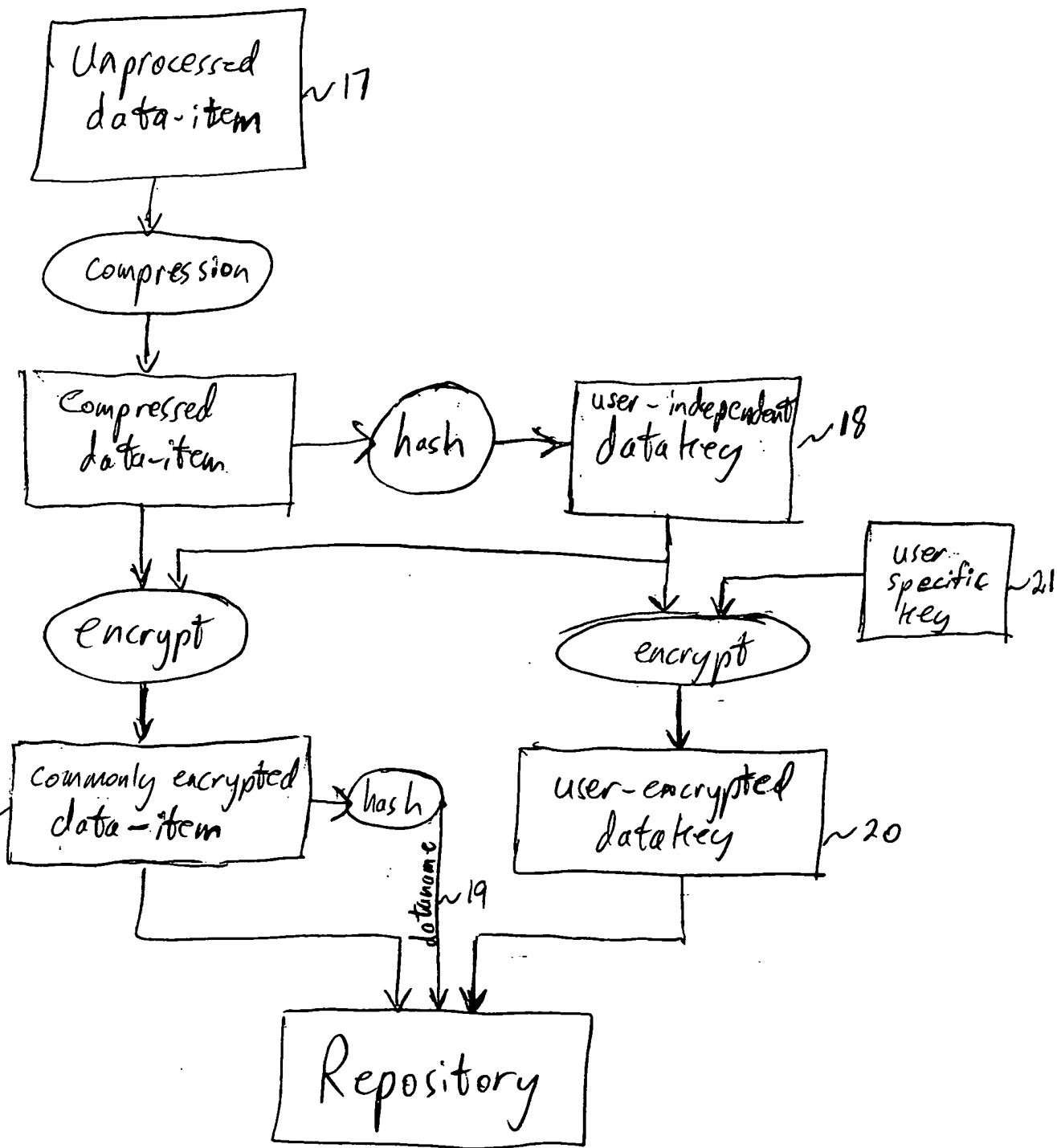


Figure 5

USER

REPOSITORY

Network

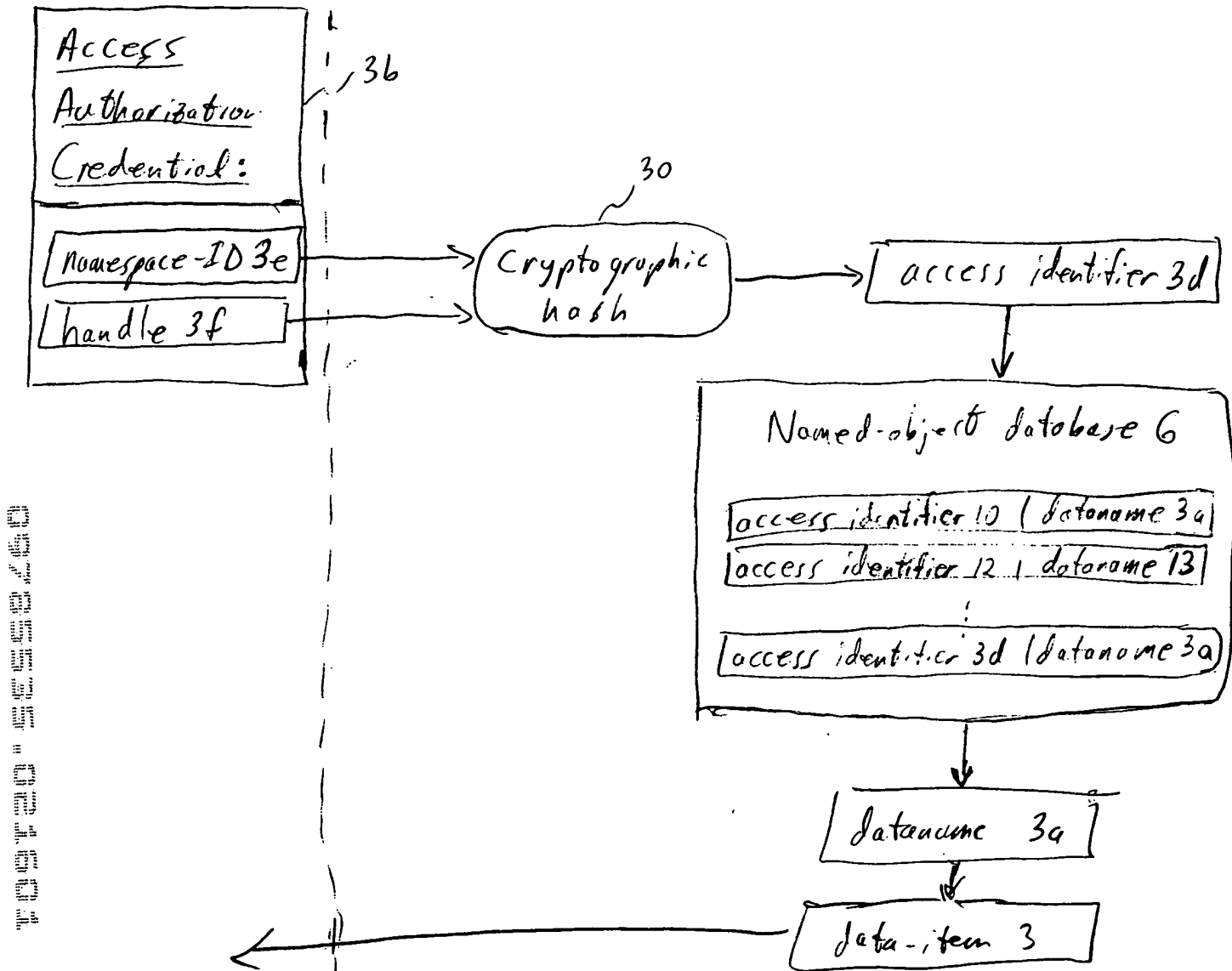


Figure 6.

USER

Repository  
Data-Server 47

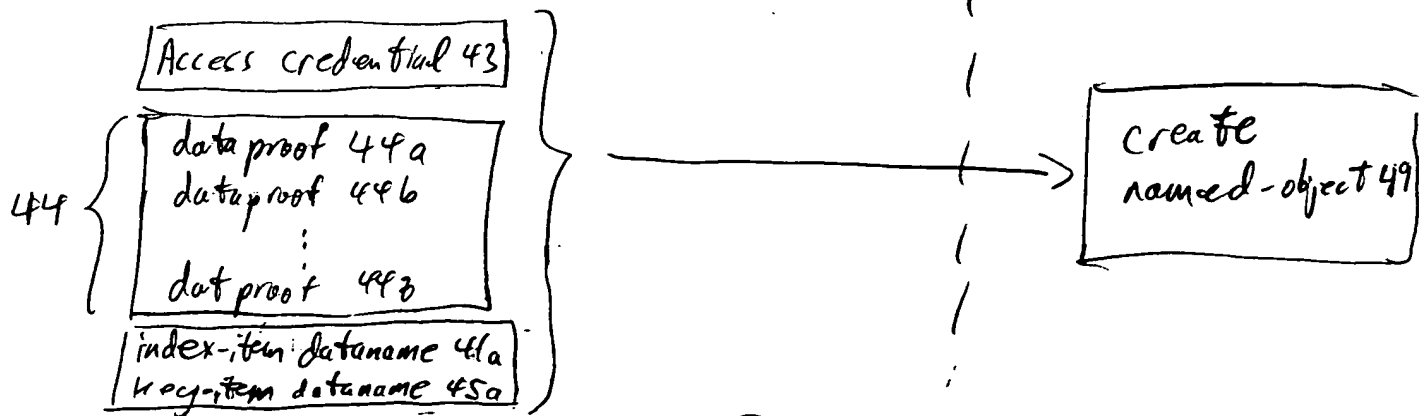
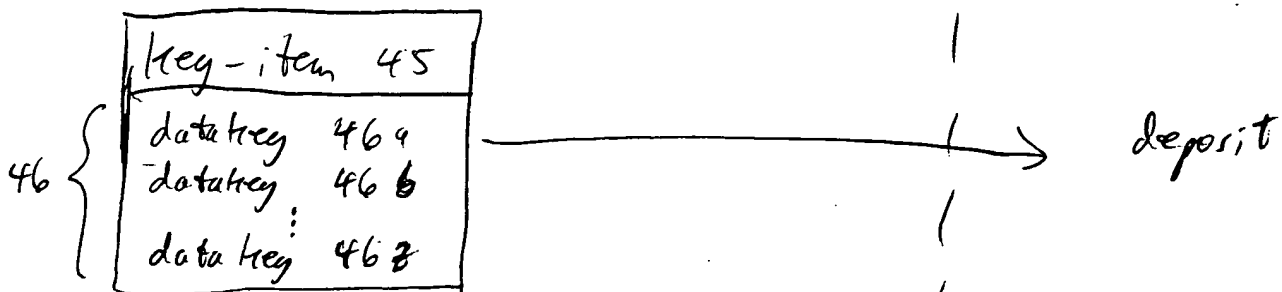
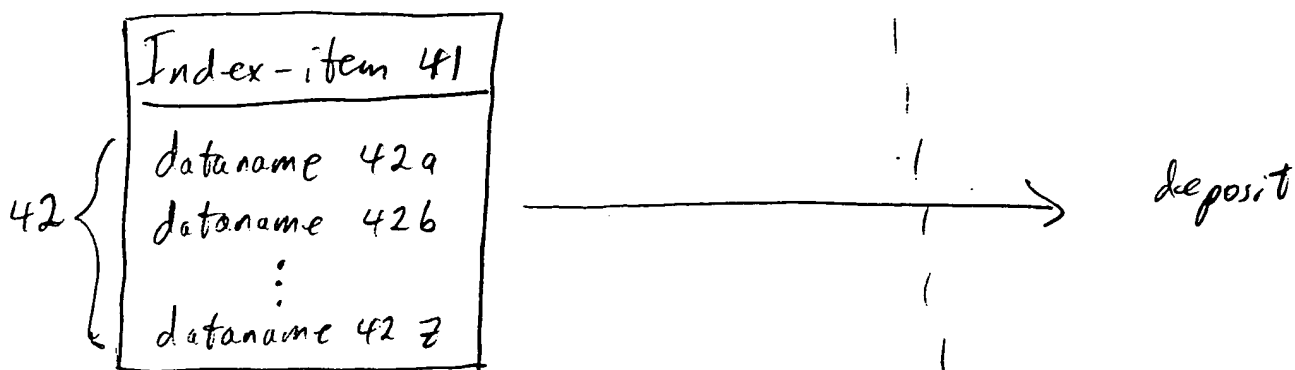
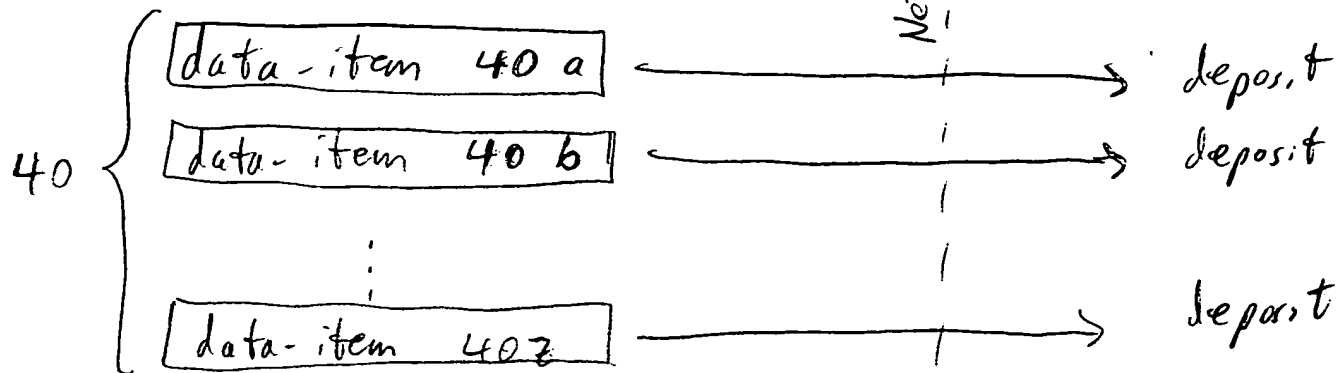
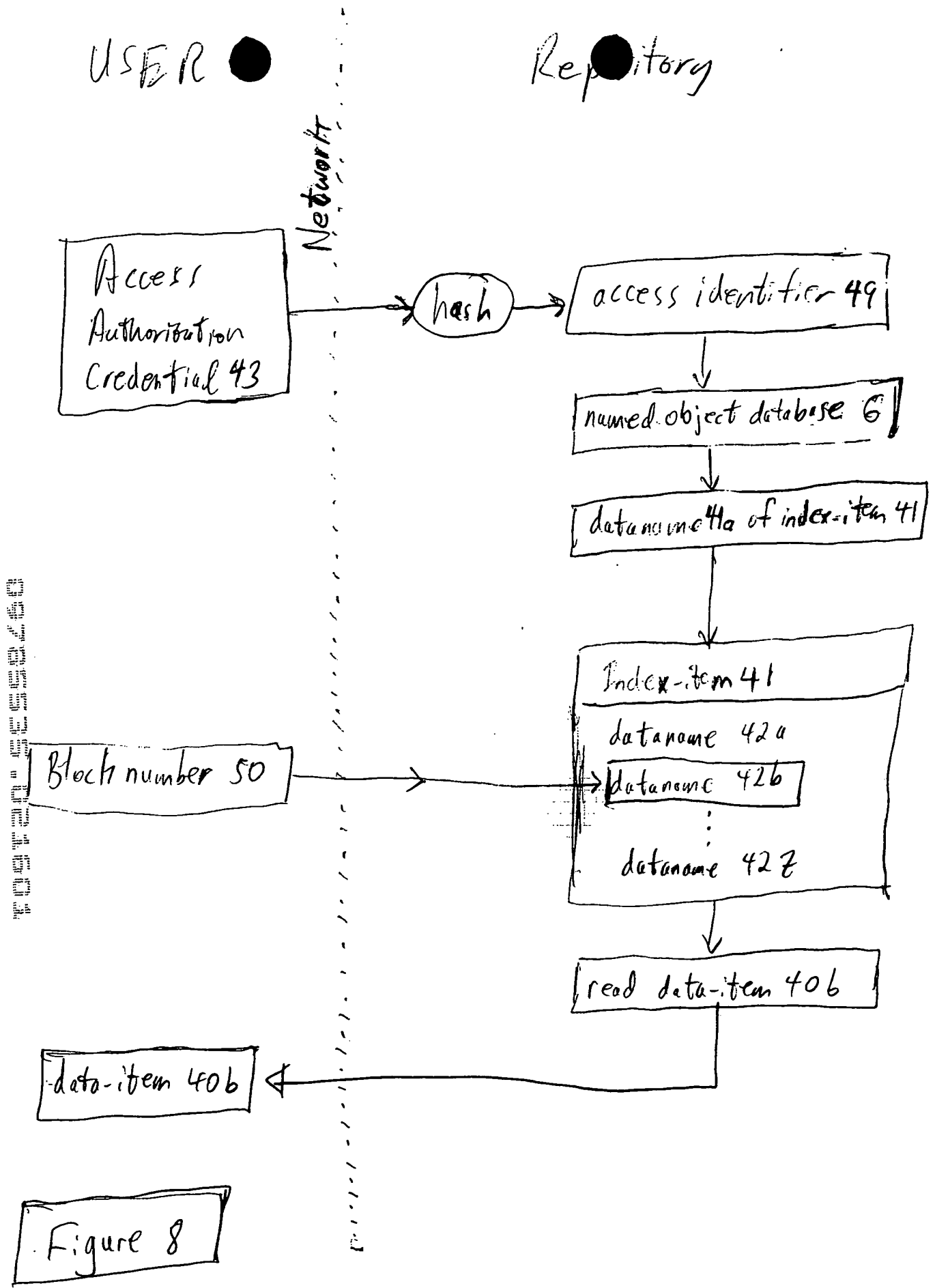


Figure 7.

USER ●

Repository ●





Client (write) 56

Repository Server

19970826250

Network

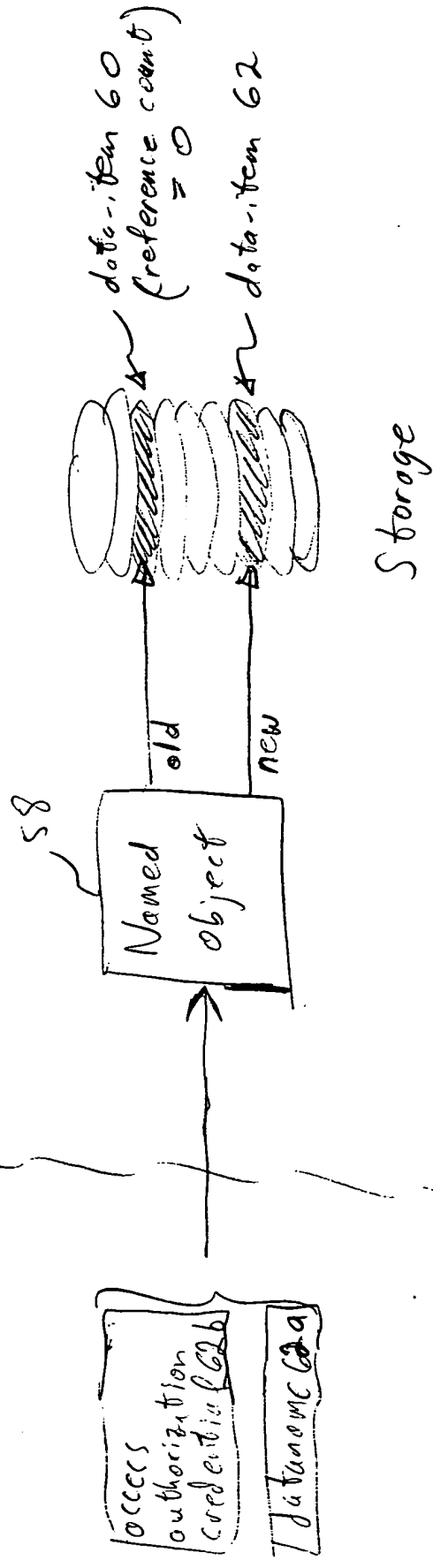


Figure 9.

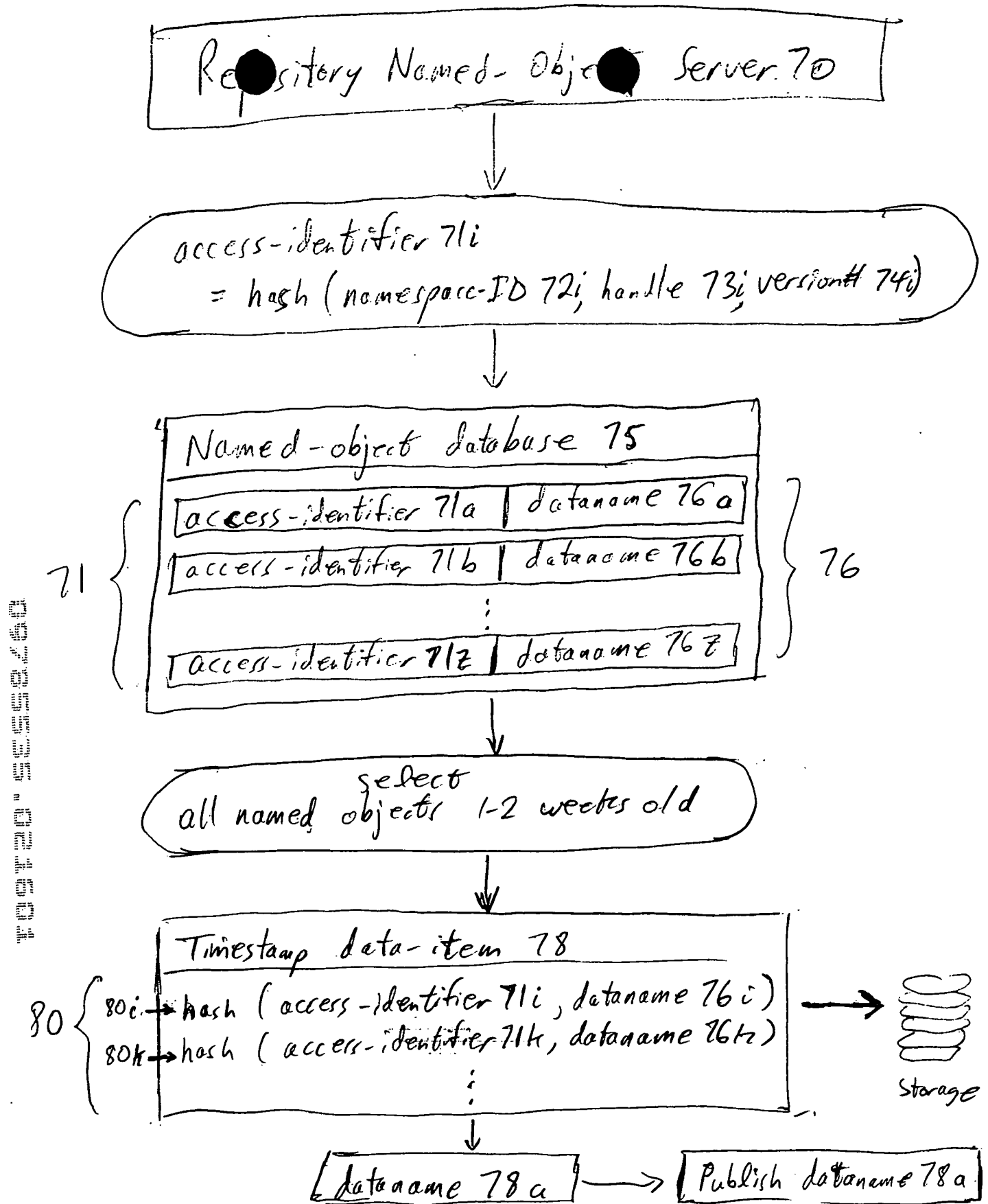
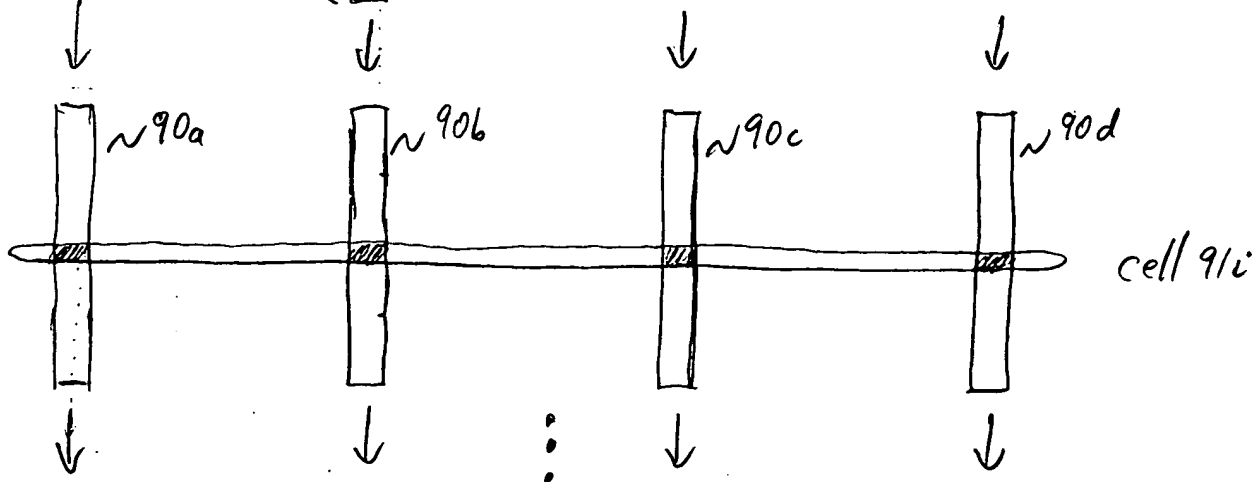
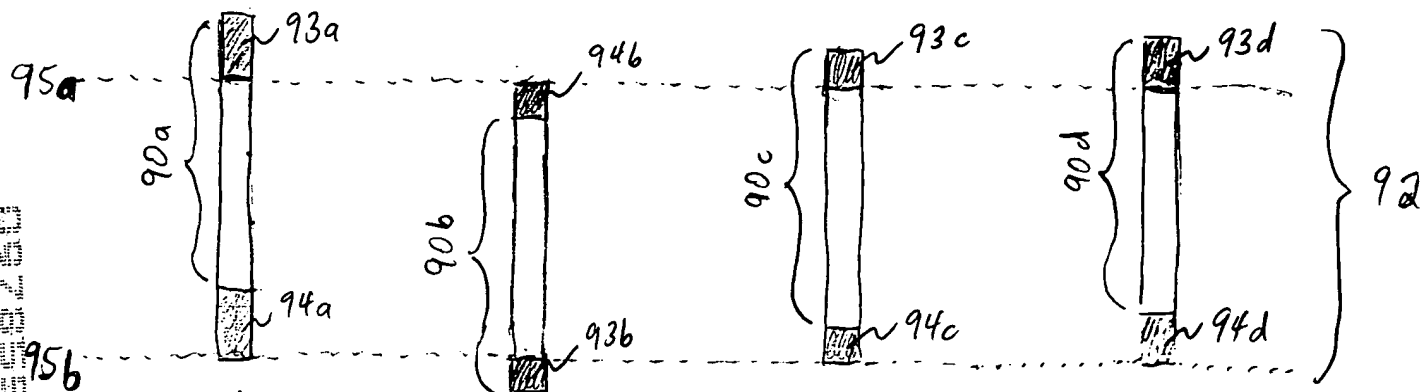
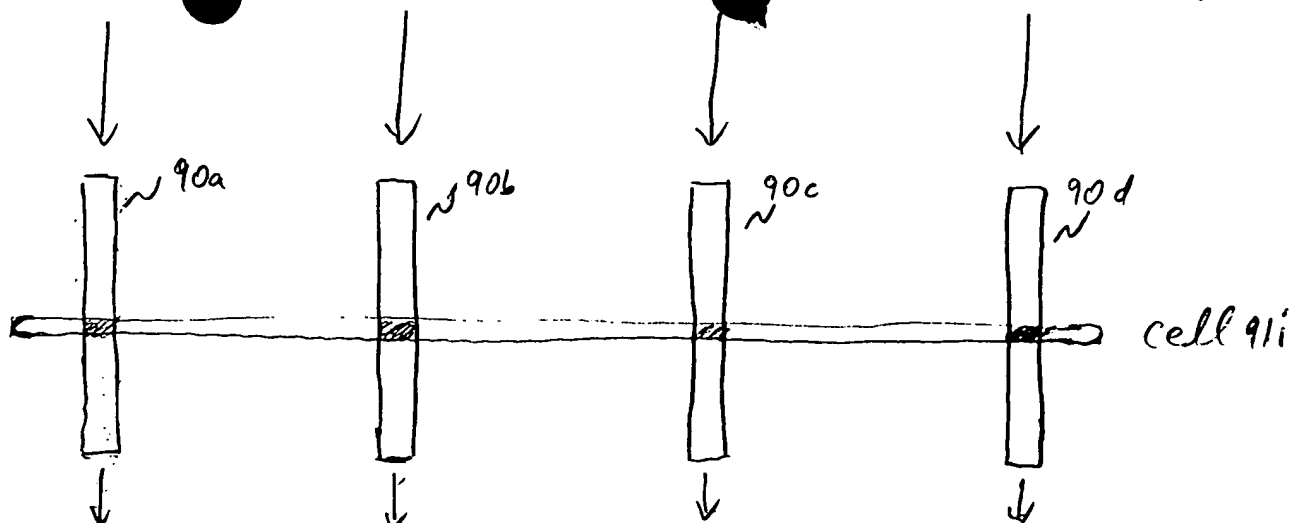


Figure 10

# Bit - String 90

bit-field 90a bit-field 90b bit-field 90c bit-field 90d



key 99:

shift amount shift amount shift amount shift amount perm# ...  
99a 99b 99c 99d 99e

Fig. 11